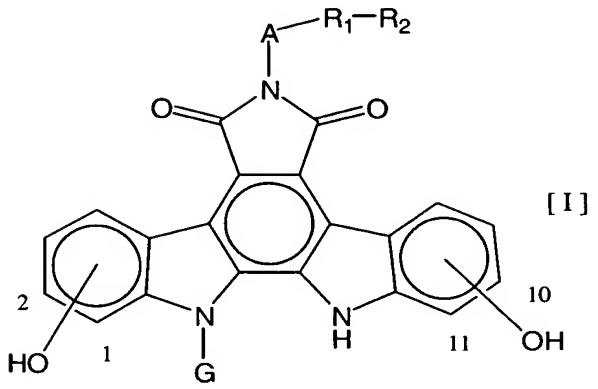
CLAIMS

1. A compound of the following formula or a pharmaceutically acceptable salt thereof:



[I]

wherein:

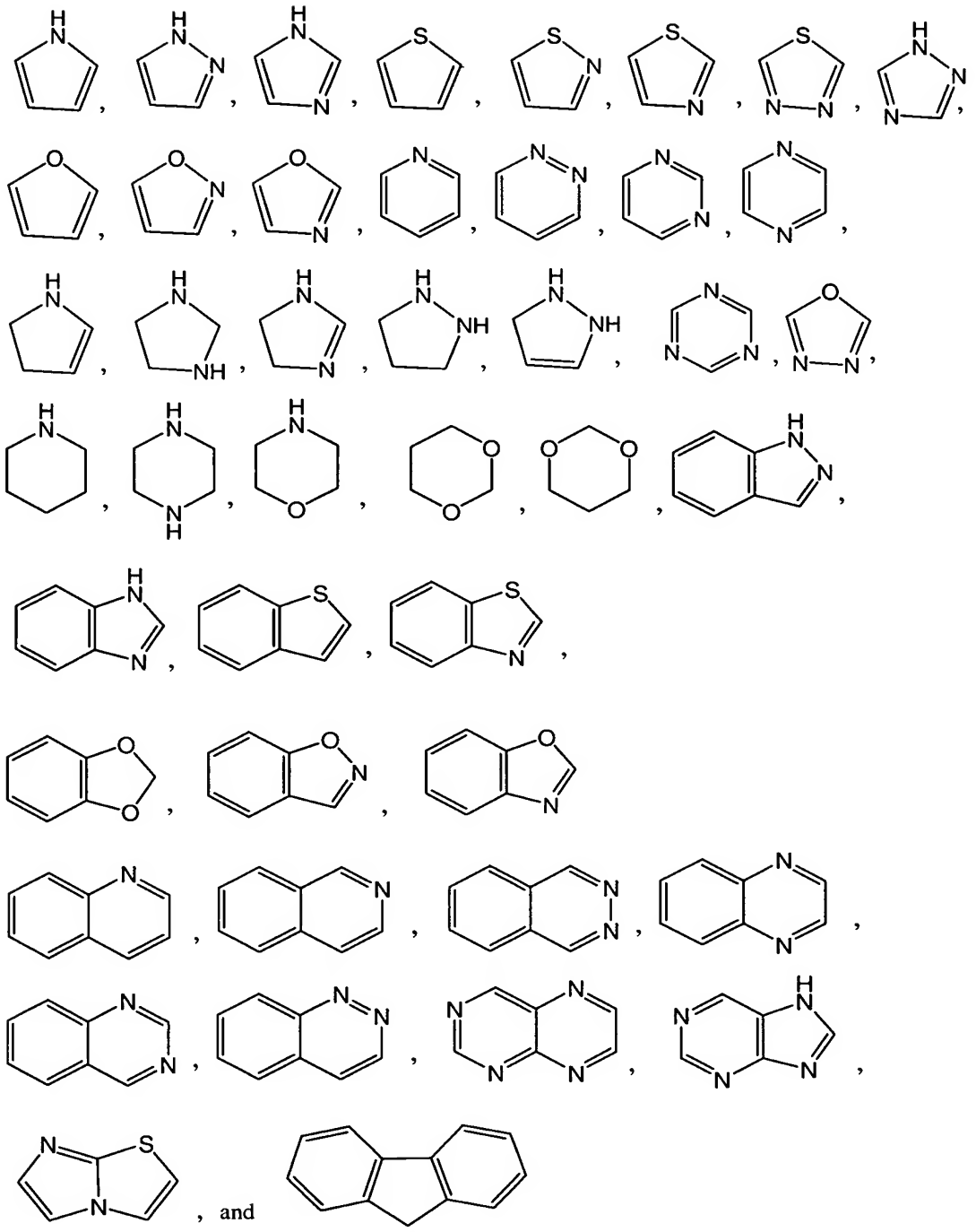
A represents O, NH, or CH_2;

R_1 represents a single bond, a lower alkyl group, a lower alkenyl group, a lower alkynyl group, or a formula of Y_1-W, wherein Y_1 represents a lower alkyl group, a lower alkenyl group or dioxanyl; W represents a single bond or an oxygen atom; said lower alkyl group, lower alkenyl group, or lower alkynyl group may be substituted with one or more substituent(s), which is/are the same or different, selected from the group consisting of <substituent group β>;

R_2 represents a phenyl group, a naphthyl group, or a five- or six-membered aromatic or aliphatic heterocyclic ring having at least one atom selected from N, S, or O, selected from the group consisting of <substituent group α>, wherein said phenyl group, naphthyl group, aromatic or aliphatic heterocyclic ring may be substituted with one or more substituent(s), which is/are the same or different, selected from the group consisting of <substituent group β> and/or a lower alkyl group substituted with one or more substituent(s), which is/are the same or different, selected from the group of <substituent group β>; when A represents an oxygen atom, R_2 may represent hydrogen atom; with a proviso that A is NH and R_1 is CH_2, R_2 is not any of a substituted phenyl group, a hydroxymethyl-substituted naphthyl group, an unsubstituted pyridyl group, a hydroxymethyl-substituted pyridyl group, an unsubstituted thienyl group, a hydroxymethyl-substituted 2-thienyl group, a mono(hydroxymethyl)-substituted 3-thienyl group, an unsubstituted furyl group and a hydroxymethyl-substituted furyl group;

G represents a hexose group or a pentose group;

<substituent group α> represents the following:



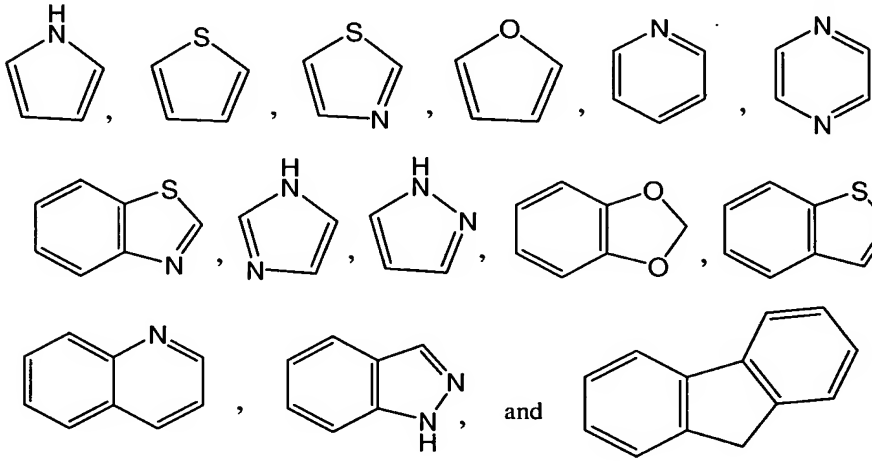
and; <substituent group β> represents the following:

a hydroxyl group, a cyano group, a halogen atom, a nitro group, a carboxyl group, a carbamoyl group, a formyl group, a lower alkanoyl group, a lower alkanoyloxy group, a lower alkoxy group, a hydroxyl lower alkoxy group, a lower alkoxy carbonyl group, a lower alkyl carbamoyl group, a di-lower alkyl carbamoyl group, a carbamoyloxy group, a lower alkyl carbamoyloxy group, a di-lower alkyl carbamoyloxy group, an amino group, a lower alkyl amino group, a di-lower alkyl amino group, a tri-lower alkyl ammonio group, a lower alkanoyl

amino group, an aroyl amino group, a lower alkanoyl amidino group, a hydroxyl imino group, a lower alkoxy imino group, a lower alkyl thio group, a lower alkyl sulfinyl group, a lower alkyl sulfonyl group, a lower alkyl sulfonylamino group and a sulfamoyl group.

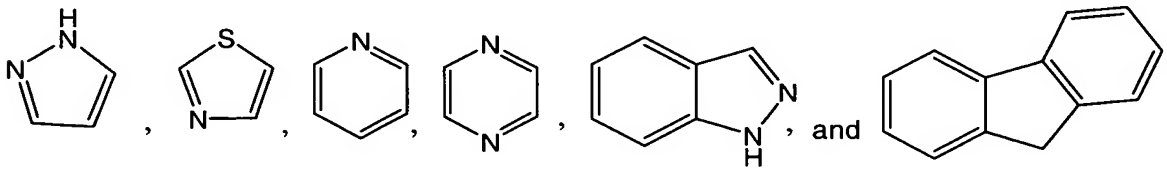
2. The compound according to claim 1 or a pharmaceutically acceptable salt thereof, wherein G represents β-glucopyranosyl group; the positions of substitution of the hydroxyl groups on the indolopyrrolocarbazole ring are the 2- and 10-positions; R_1 represents a lower alkyl group; and R_2 represents a five- or six-membered aromatic or aliphatic heterocyclic ring having at least one atom selected from N, S, or O, selected from the group consisting of the <substituent group α>.

3. The compound according to claim 2 or a pharmaceutically acceptable salt thereof, wherein the <substituent group α> represents the following:



and the <substituent group β> represents the following:
a hydroxyl group, a nitro group, a lower alkanoyl group, a lower alkanoyloxy group, a lower alkoxy group, and a lower alkoxy carbonyl group.

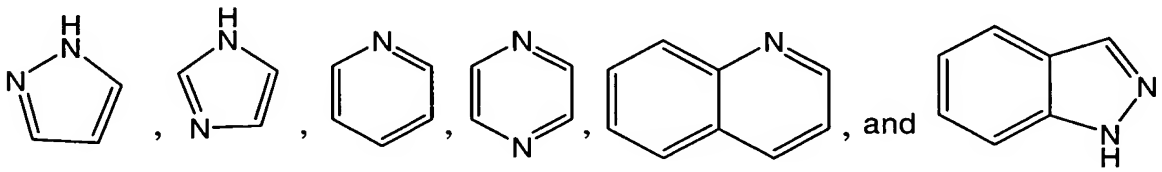
4. The compound according to claim 3 or a pharmaceutically acceptable salt thereof, wherein A represents O; the <substituent group α> represents the following:



; and

the <substituent group β> represents the following:
a hydroxyl group, a lower alkanoyl group, a lower alkanoyloxy group, and a lower alkoxy carbonyl group.

5. The compound according to claim 3 or a pharmaceutically acceptable salt thereof, wherein A represents NH or CH_2; the <substituent group α> represents the following:



; and the <substituent group β> represents the following:
a hydroxyl group, a lower alkanoyl group, and a lower alkyl carbonyloxy group.

6. A compound according to claim 1 which is:
6-N-(2,5-dihydroxymethyl-3-thienylmethyl)amino-12,13-dihydro-2,10-dihydroxy-12-β-D-glucopyranosyl-5H-indolo[2,3-a]pyrrolo[3,4-c]carbazole-5,7(6H)-dione;
6-N-pyrazinylmethylamino-12,13-dihydro-2,10-dihydroxy-12-β-D-glucopyranosyl-5H-indolo-[2,3-a]pyrrolo[3,4-c]carbazole-5,7(6H)-dione;
6-N-(4-quinolinylmethylamino)-12,13-dihydro-2,10-dihydroxy-12-β-D-glucopyranosyl-5H-indolo[2,3-a]pyrrolo[3,4-c]carbazole-5,7(6H)-dione;
6-N-(4-nitro-2-1H-pyrrolylmethyl)amino-12,13-dihydro-2,10-dihydroxy-12-β-D-glucopyranosyl-5H-indolo[2,3-a]pyrrolo[3,4-c]carbazole-5,7(6H)-dione;
6-N-(2-1H-pyrrolylmethyl)amino-12,13-dihydro-2,10-dihydroxy-12-β-D-glucopyranosyl-5H-indolo[2,3-a]pyrrolo[3,4-c]carbazole-5,7(6H)-dione;
6-N-(3-1H-pyrazolylmethyl)amino-12,13-dihydro-2,10-dihydroxy-12-β-D-glucopyranosyl-5H-indolo[2,3-a]pyrrolo[3,4-c]carbazole-5,7(6H)-dione;
6-N-(4-1H-imidazolylmethyl)amino-12,13-dihydro-2,10-dihydroxy-12-β-D-glucopyranosyl-5H-indolo[2,3-a]pyrrolo[3,4-c]carbazole-5,7(6H)-dione;
6-N-(2-methoxycarbonyl-6-pyridylmethyl)amino-12,13-dihydro-2,10-dihydroxy-12-β-D-glucopyranosyl-5H-indolo[2,3-a]pyrrolo[3,4-c]carbazole-5,7(6H)-dione;
6-N-(4-pyridylmethoxy)-12,13-dihydro-2,10-dihydroxy-12-β-D-glucopyranosyl-5H-indolo-[2,3-a]pyrrolo[3,4-c]carbazole-5,7(6H)-dione;
6-N-(6-hydroxymethyl-2-pyridylmethoxy)-12,13-dihydro-2,10-dihydroxy-12-β-D-glucopyranosyl-5H-indolo[2,3-a]pyrrolo[3,4-c]carbazole-5,7(6H)-dione;
6-N-(3-hydroxymethyl-4-pyridylmethoxy)-12,13-dihydro-2,10-dihydroxy-12-β-D-glucopyranosyl-5H-indolo[2,3-a]pyrrolo[3,4-c]carbazole-5,7(6H)-dione; or
6-N-(2-(4-pyridyl)ethyl)-12,13-dihydro-2,10-dihydroxy-12-β-D-glucopyranosyl-5H-indolo-[2,3-a]pyrrolo[3,4-c]carbazole-5,7(6H)-dione,
or a pharmaceutically acceptable salt thereof.

7. A pharmaceutical composition comprising the compound according to any one of claims 1 to 6 as an active ingredient, together with a pharmaceutically acceptable

carrier or diluent.

8. An antitumor agent comprising the compound according to any one of claims 1 to 6 as an active ingredient, together with a pharmaceutically acceptable carrier or diluent.